

Proton Radiography Call for Proposals

The Los Alamos Neutron Science Center (LANSCE) is issuing a Call for Proposals for experiments to be carried out at the Proton Radiography Facility during FY2007. This period will cover the October-December portion of the present run cycle as well as some sizeable fraction of the experiments to be conducted during the second run cycle that will occur in the latter part of FY2007. An additional call for new proposals will also be issued for the second run cycle in FY2007. Present plans are to have a 3-4 month maintenance cycle beginning in January 2007 with beam delivery to begin again in the May - June 2007 time frame. Proposals that have been previously reviewed must be resubmitted for consideration in the FY2007 run cycle, even if they received very high scores in the past.

All experiments whether they are dynamic, static, classified or unclassified must have a corresponding proposal submitted to the PAC. Because of the projected funding for FY2007, there are limited resources to support outside users or experiments without identified funding sources. The discussion below identifies topics where sponsors have indicated interest in ideas. The PAC is an advisory committee to LANSCE Division and not a funding committee. However the PAC ranking may be folded into programmatic sponsors' decision making processes and used as a means for pRad management to identify potential funding.

All proposals that cover work that is continuing or are an extension of work being done this year must attach either a progress report, a final shot report, or a published paper on the results of said work. An overview of proton radiography capabilities by Frank Merrill will be posted on the p-rad website at <https://pcprad57.lanl.gov/PAC07.pdf> along with an example of a good proposal.

The proposals should include the objectives for the experiments, importance of achieving these objectives, why pRad experiments are the best means of achieving the objectives, and show an operationally feasible approach. Technical, operational, and safety risks should all be identified. Proposals should provide a detailed description of the experimental devices, the experimental configurations and beam time requested. Good integration with modeling and validation programs where appropriate will improve proposal ratings.

The following are suggestions for topics that could attract programmatic support.

C1, C2, C4: Teams with ideas for research in these areas should coordinate with the appropriate program manager

- Validation experiments addressing high priority physics issues
 - Mix
 - EOS
 - Dynamic Damage
 - IHE
- Experiments supporting Sub-Critical Experiments

- Experiments supporting RRW, safety, and surety
Experiments addressing variability in important processes and uncertainty quantification
- Fundamental experiments utilizing pRad capability for top physics issues
- Experiments supporting the Joint Munitions Program

C3: Teams with ideas for proposals supporting development of improved pRad capability should coordinate with the C-3 program manager

DSW: Teams are urged to work with designers and weapons managers on potential topics of DSW interest

C8: Teams are urged to work with the C-8 program manager on topics that would address surveillance issues or response of aged materials.

Threat Reduction: Teams are urged to work with TR managers on experiments that address TR capabilities or problems.

Unclassified proposals must be submitted to the LANSCE User Office (lansce_users@lanl.gov) no later than **May 22** using the attached form.

If submitting hardcopies of classified proposals, they may be sent to
 Los Alamos National Laboratory
 Mail Station 5000
 LANSCE User Office c/o MS H803
 Los Alamos, NM 87545

or hand carried to
 TA-53, Bldg. 1, Room D108

Electronic versions of classified proposals may be emailed to dgf@lanl.gov on the secure network.

The proposals will be peer reviewed by the Program Advisory Committee (PAC) in late May.

For technical questions, contact Frank Merrill (fmerrill@lanl.gov). Any other questions should be directed to the User Office at lansce_users@lanl.gov or 505-665-1010.

Proposals are due **May 22, 2006.**